IBM

FLOWCHARTING TEMPLATE

FORM X20-8020

The symbols shown on this envelope are recommended for use in the preparation of system and program flowcharts.

A detailed description of FLOWCHARTING TECHNIQUES can be found in the IBM Data Processing Techniques manual by that name (C20-8152).

PROGRAM FLOWCHART SYMBOLS

SYMBOL	REPRESENTS
	PROCESSING — A group of program instructions which perform a processing function of the program.
	INPUT/OUTPUT — Any function of an input/output device (making information available for processing, recording processing information, tape positioning, etc.).
	DECISION — The decision function used to document points in the program where a branch to alternate paths is possible based upon variable conditions.
	PROGRAM MODIFICATION — An instruction or group of instructions which changes the program.
	PREDEFINED PROCESS — A group of operations not detailed in the particular set of flowcharts.
	TERMINAL — The beginning, end, or a point of interruption in a program.
	CONNECTOR — An entry from, or an exit to, another part of the program flowchart.
	OFFPAGE CONNECTOR — A connector used instead of the connector symbol to designate entry to or exit from a page.
◁ ▷ ▽ △	**FLOW DIRECTION** — The direction of processing or data flow.

SUPPLEMENTARY SYMBOL FOR SYSTEM AND PROGRAM FLOWCHARTS
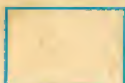
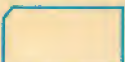|	
	ANNOTATION — The addition of descriptive comments or explanatory notes as clarification.

SYSTEM FLOWCHART SYMBOLS

PROCESSING

A major processing function.

INPUT/ OUTPUT

Any type of medium or data.

PUNCHED CARD

All varieties of punched cards including stubs.

PERFORATED TAPE

Paper or plastic, chad or chadless.

DOCUMENT

Paper documents and reports of all varieties.

TRANSMITTAL TAPE

A proof or adding machine tape or similar batch-control information.

MAGNETIC TAPE

DISK, DRUM, RANDOM ACCESS

OFFLINE STORAGE

Offline storage of either paper, cards, magnetic or perforated tape.

DISPLAY

Information displayed by plotters or video devices.

ONLINE KEYBOARD

Information supplied to or by a computer utilizing an online device.

SORTING, COLLATING

An operation on sorting or collating equipment.

CLERICAL OPERATION

A manual offline operation not requiring mechanical aid.

AUXILIARY OPERATION

A machine operation supplementing the main processing function.

KEYING OPERATION

An operation utilizing a key-driven device.

COMMUNICATION LINK

The automatic transmission of information from one location to another via communication lines.

FLOW   ◁   ▷   ▽   △

The direction of processing or data flow.

TERMINAL

PREDEFINED PROCESS

PROGRAM MODIFICATION

CONNECTOR

OFFPAGE CONNECTOR

INPUT/OUTPUT

COMMUNICATION LINK

DECISION

PROCESSING, ANNOTATION

FLOW

OFFLINE STORAGE FILE

PUNCHED CARD

INCHES (8ths, 4ths)

DOCUMENT

MAGNETIC TAPE, SORTING, COLLATING

TRANSMITTAL TAPE

AUXILIARY OPERATION

PERFORATED TAPE

CLERICAL OPERATION

DISK, DRUM, RANDOM ACCESS FILE

DISPLAY

ONLINE KEYBOARD

KEYING OPERATION

INCHES (10mm)

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